

## REMARKS/ARGUMENTS

Claims 1-11 are pending herein. Claims 7-10 have been withdrawn as being drawn to a non-elected invention. The specification has been amended hereby as shown in the substitute specification paragraph on page 2 of this Amendment. Applicant respectfully submits that support for the specification Amendment can be found at least in original Fig. 3 of the present application, for example. Applicant respectfully submits that no new matter has been added.

1. Examiner Soohoo is thanked for courtesies extended to Applicant's representatives (Steve Burr and Nicole Buckner) during a telephonic interview on March 13, 2007, the substance of which is incorporated below.
2. Claims 1-6 and 11 were rejected under §112, first paragraph. Applicant respectfully submits that this rejection is moot in view of the amended specification paragraph submitted herewith. Specifically, the specification has been amended to include the language recited in claims 1 and 11 with respect to the relative size and shape of the holes in the partition member. During the telephonic interview, Examiner Soohoo agreed that support for this amendment is provided by the original drawings, such as Fig. 3, for example, and indicated that the above rejection would be withdrawn in view of such a specification amendment. In view of the above, Applicant respectfully requests that the above rejection be reconsidered and withdrawn.
3. Claims 1-6 and 11 were rejected under §102(b) over Flint '209 and Flint '632, each taken separately. Applicant respectfully traverses these rejections.

Independent claim 1 recites a mixing tube comprising a first mixing passage and a second mixing passage, in each of which a plurality of elements having a sectional shape that changes continuously are connected in series, such that a plurality of types of materials to be mixed pass through the first mixing passage and the second mixing passage. The materials to be mixed are repeatedly divided and aggregated in a

passing process, wherein the first mixing passage and the second mixing passage are formed by a first outer frame member, a second outer frame member, and a partition member is interposed between the first outer frame member and the second outer frame member, so that the three members divide the mixing tube in a direction toward which the materials to be mixed pass. A plurality of holes, each having the same size as one another, are formed at fixed intervals in the partition member in a direction along which the materials are mixed, so that the first mixing passage and the second mixing passage repeatedly divide and aggregate due to the holes, thereby repeatedly dividing and aggregating the materials to be mixed so that the materials are divided  $2^N$  times and merged together. The mixing tube comprises a soft thermoplastic resin which can be squeezed over its entirety with a predetermined force.

Applicant respectfully submits that Flint '209, Flint '632 fail to disclose, or even suggest that each of the openings in the respective intermediate sheets have the same size as one another, as claimed, for at least the reasons explained in the Amendment filed on August 16, 2006, the entirety of which is incorporated herein by reference, and for the further reasons explained below.

Flint '209 expressly shows and expressly states that the circular openings in the intermediate sheet do not each have the same size as one another (see Flint '209, Figs. 7 and 8 and Col. 6, lines 50-51). Flint '632 shows and expressly states that there is a clear and deliberate size difference among the various circular openings provided in the intermediate sheet (see Flint '632, Fig. 3 and Col. 4, lines 25-33).

That is, according to that which is actually shown in and conveyed by the drawings in Flint '209, even a lay person would understand that the circular holes (openings) 152a-152c shown in Figs. 7 and 8 are visually represented to be smaller than the other circular holes 154a-154c in the intermediate sheet; these drawings clearly show and convey that the holes do not have the same size as one another. Moreover, the accompanying text in Column 6, lines 50-51 of Flint '209 explicitly confirms what is shown in the drawings—that each of the holes in the intermediate sheet do not have the same size as one another.

Similarly, the drawings in Flint '632, and Fig. 3, for example, clearly show that the circular openings 80 in the intermediate sheet 22 are smaller than the other circular openings 85 shown in the intermediate sheet. And again, this deliberate size difference among the holes provided in the same intermediate sheet is also confirmed and explicitly disclosed in Column 4, lines 25-33 of Flint '632.

In view of the clear teaching in both Flint '209 and Flint '632 that the circular openings should specifically have different sizes with respect to one another, Applicant respectfully submits that one skilled in the art would not have been motivated to modify the sizes of those holes so that each hole would have the same size as one another. Indeed, such a modification would not be at all consistent with the express teachings in Flint '209 and Flint '632 with respect to the structures responsible for providing desired flow properties and mixing mechanisms.

During the telephonic interview, Examiner Soohoo agreed that Flint '209 and Flint '632 fail to disclose that the holes formed in the intermediate sheets each have the same size as one another, as claimed. In view of the above, Examiner Soohoo tentatively indicated that he would favorably reconsider the above rejection.

In addition, independent claim 1 also recites that the first and second mixing passages each include a plurality of elements connected in series and having a cross-sectional shape that continuously changes. Fig. 4 of the present application illustrates an example of elements which each have cross-sectional shapes that change continuously according to one embodiment of the present invention.

Applicant respectfully submits that Flint '209 and Flint '632 each fail to disclose the specifically claimed plurality of elements connected in series and having a sectional shape that changes continuously. For example, in Flint '632, Figs. 3 and 4 show that the cross-sectional shape of the "elements" 56a and 60a, for example, which are connected in series, is substantially constant over a significant portion of each compartment element. Similarly, in Flint '209, the cross-sectional shape of the series connected "elements," such as compartments 148 and 150, is substantially constant over at least a significant portion of each element, as shown in Figs. 7 and 8,

for example. Applicant respectfully submits that Flint '209 and Flint '632 simply do not expressly or implicitly disclose, or even begin to suggest, the specifically claimed cross-sectional shape feature of the elements recited in claim 1.

During the telephonic interview, Examiner Soohoo also tentatively agreed to give the above-outlined arguments favorable consideration after reviewing a written response and conducting a further review of Flint '209 and Flint '632. Favorable consideration of these arguments is respectfully requested.

For at least the reasons explained above, Applicant respectfully submits that both Flint '209 and Flint '632 fail to disclose, or even suggest, each and every feature recited in independent claim 1. As such, Applicant respectfully submits that independent claim 1, and all claims depending directly or indirectly therefrom, define patentable subject matter over the applied references, and respectfully request that the above rejection be reconsidered and withdrawn.

If Examiner Soohoo believes that contact with Applicant's attorney would be advantageous toward the disposition of this case, he is herein requested to call Applicant's attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

March 15, 2007

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Date



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